

In the claims: The claims are as follows.

1. (Currently amended) A method of operation for a telecommunication device, comprising:

transmitting segments at a rate of transmission over a communication path to a receiver telecommunication device and increasing the rate of transmission starting from a first starting point for the rate of transmission, based on feedback\_-received from the receiver telecommunication device provided as acknowledgements of the transmitted segments;

receiving a message including one or more bits set to a value predetermined to convey an indication of low congestion irrespective of any particular one of the transmitted segments and so not providing feedback in the form of acknowledgements of the transmitted segments; and

in response to the indication of low congestion, performing an accelerated start so as to reach maximum throughput in less time by changing to a second starting point greater than the first starting point and greater than the current rate of transmission, and increasing the rate of transmission starting from the second starting point.

2. (Previously presented) The method of claim 1, wherein transmitting segments at a rate of transmission includes initializing a congestion window to a first starting number of segments and increasing the congestion window by a predetermined number of segments each time an acknowledgement for a segment is received.

3. (Previously presented) The method of claim 2, wherein in performing the accelerated start the congestion window is re-

initialized to a second starting number of segments greater than the first starting number of segments, and the congestion window is grown at a predetermined rate in response to received positive acknowledgments.

Claims 4-8 are canceled.

9. (Previously presented) The method of claim 2, wherein performing the accelerated start includes growing the congestion window at a window growth rate of one segment for every received positive acknowledgement, but adjusting the window growth rate in the event of an indication of other than low congestion.

10. (Previously presented) The method of claim 3, the accelerated start is performed after a connection with the receiver telecommunication device is first established.

11. (Previously presented) The method of claim 10, wherein the indication of low congestion is based on the value of a bit in a message received from either the receiver or by an intermediate node along the communication path or by a centralized node outside or along the path.

12. (Previously presented) The method of claim 3, wherein the accelerated start is performed after transferring to a new communication path for an existing connection with the receiver telecommunication device, and further wherein the congestion window for the new path is initially set to the value for the congestion window when the path transfer occurs.

13. (Previously presented) The method of claim 12, wherein

the indication of low congestion is based on the value of a bit in a message received from either the receiver or by an intermediate node along the communication path or by a centralized node outside or along the path.

14. (Currently amended) A telecommunication device, comprising a protocol layer configured to:

transmit segments at a rate of transmission and increasing the rate of transmission starting from a first starting point for the rate of transmission, based on feedback indicating successful receipt of the segments in the form of acknowledgements of the transmitted segments;

receive a message including one or more bits set to a value predetermined to convey an indication of low congestion irrespective of any particular one of the transmitted segments and so not providing feedback in the form of acknowledgements of the transmitted segments; and,

in response to the indication of low congestion, perform an accelerated start so as to reach maximum throughput in less time by changing to a second starting point greater than the first starting point and greater than the current rate of transmission, and increase the rate of transmission starting from the second starting point.

15. (Previously presented) The telecommunication device of claim 14, wherein the protocol layer is a transport layer of a transmission control protocol, and is configured to start a congestion window at a first starting number of segments and to initially increase the congestion window by a predetermined number of segments each time an acknowledgement for a segment is received; and wherein the protocol layer is

configured to perform the accelerated start by re-initializing the congestion window to a second starting number of segments greater than the first starting number of segments, and then growing the congestion window at a predetermined rate in response to received positive acknowledgments.

16. (Previously presented) A telecommunication system, comprising a plurality of intermediate nodes and also a plurality of telecommunication devices, wherein at least one of the telecommunication devices is as in claim 14.

17. (Previously presented) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by a computer processor in a telecommunication device having a protocol layer for sending and receiving segments, with said computer program code including instructions for performing the method of claim 1.

18-21. Canceled.

22. (Previously presented) The telecommunication system of claim 16, wherein the protocol layer is a transport layer of real time control protocol layer or other streaming or datagram protocols.

23. (Previously presented) The telecommunication system of claim 16, wherein the telecommunication system includes a radio access network.

24. (Previously presented) The telecommunication system of claim 16, wherein the telecommunication system includes a

wireless telecommunication system using enhanced general packet radio service or uses general packet radio service.

25. (Previously presented) The telecommunication system of claim 16, wherein telecommunication system includes a Universal Mobile Telecommunication System network.

26. (Previously presented) The telecommunication system of claim 16, wherein the telecommunication system uses code division for providing multiple access.

27. (Currently amended) A telecommunication device, comprising:

means for transmitting segments at a rate of transmission and increasing the rate of transmission at a first rate of increase starting from a first starting point for the rate of transmission, based on feedback in the form of acknowledgements of the transmitted segments~~indicating successful receipt of the segments;~~

means for receiving a message including one or more bits set to a value predetermined to convey an indication of low congestion irrespective of any particular one of the transmitted segments and so not providing feedback in the form of acknowledgements of the transmitted segments; and,

means for, in response to the indication of low congestion, performing an accelerated start so as to reach maximum throughput in less time by changing to a second starting point greater than the first starting point and greater than the current rate of transmission, and increasing the rate of transmission starting from the second starting point.